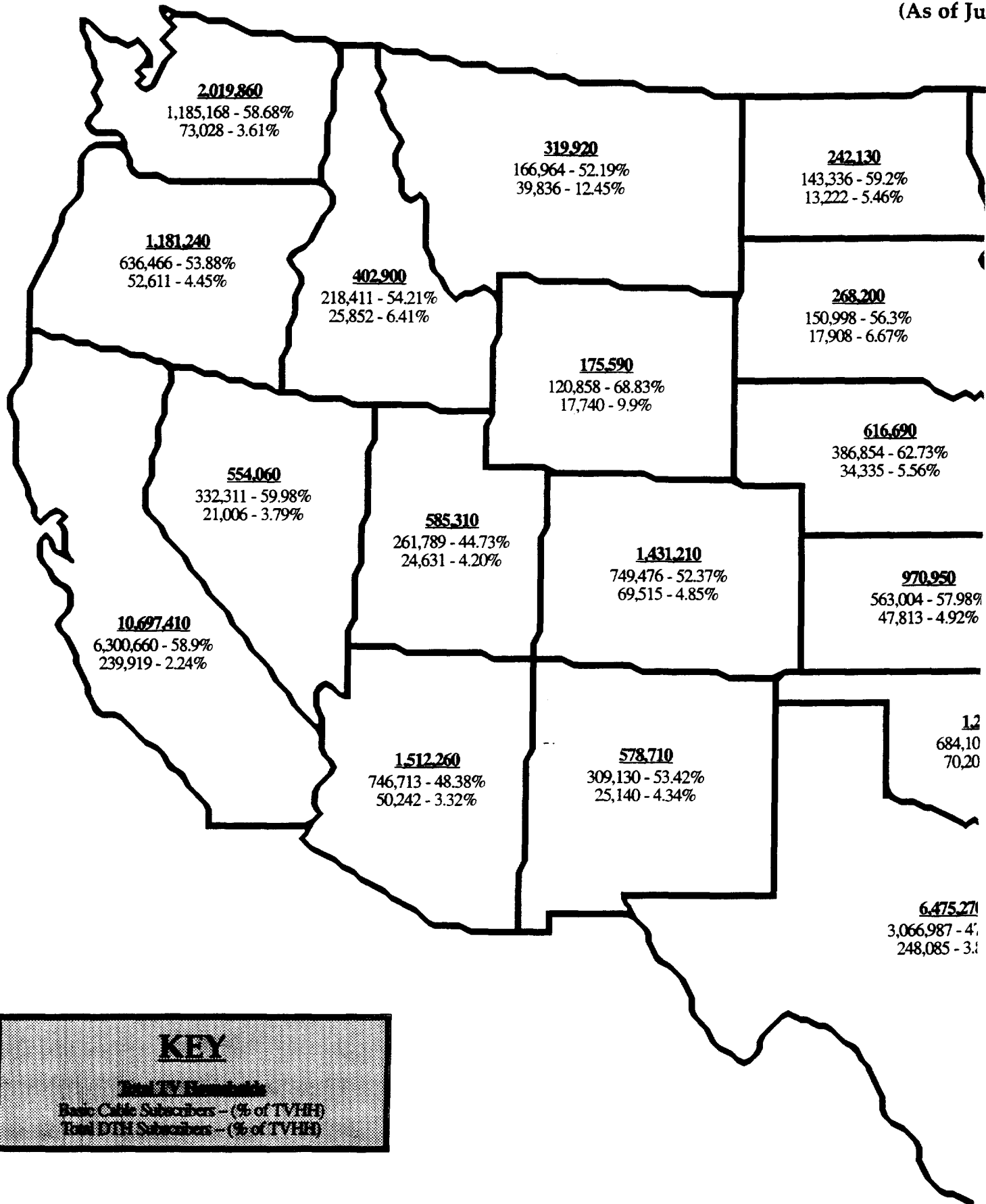


Total DTH Subs

(As of Ju



STATE	NUMBER OF TV HH	BASIC CABLE SUBS	DTH SUBS	% OF HH WITH CABLE	% OF HH WITH DTH
Alabama	1,572,620	899,201	91,459	57.18%	5.82%
Arizona	1,512,260	746,713	50,242	49.38%	3.32%
Arkansas	924,050	521,561	63,311	56.44%	6.85%
California	10,697,410	6,300,660	239,919	58.90%	2.24%
Colorado	1,431,210	749,476	50,343	52.37%	3.52%
Connecticut	1,213,810	878,615	20,909	72.38%	1.72%
Delaware	261,750	224,323	7,436	85.70%	2.84%
D.C.	228,180	100,400	921	44.00%	0.40%
Florida	5,510,530	3,732,538	181,934	67.73%	3.30%
Georgia	2,572,520	1,524,676	128,329	59.27%	4.99%
Hawaii	379,670	383,399	1,670	100.98%	0.44%
Idaho	402,900	218,411	25,852	54.21%	6.42%
Illinois	4,274,700	2,220,907	86,535	51.95%	2.02%
Indiana	2,138,000	1,169,120	102,226	54.68%	4.78%
Iowa	1,081,980	602,109	55,094	55.65%	5.09%
Kansas	970,950	563,004	47,813	57.98%	4.92%
Kentucky	1,418,160	935,301	82,955	65.95%	5.85%
Louisiana	1,522,980	940,156	55,800	61.73%	3.66%
Maine	467,770	296,332	28,329	63.35%	6.06%
Maryland	1,826,770	1,042,716	31,225	57.08%	1.71%
Massachusetts	2,235,210	1,544,883	14,238	69.12%	0.64%
Michigan	3,491,810	2,081,867	105,509	59.62%	3.02%
Minnesota	1,717,910	807,368	55,958	47.00%	3.26%
Mississippi	932,140	471,094	79,679	50.54%	8.55%
Missouri	2,011,340	998,806	93,380	49.66%	4.64%
Montana	319,920	166,964	39,836	52.19%	12.45%

Number of TV Households from A.C. Nielsen, Television and Cable Factbook, 1995. Basic Cable Subscribers from Warren Publishing, Inc., Television & Cable Factbook, 1995. Number of DTH Subscribers supplied to SkyTRENDS by C-Band, Medium-Powered and High Powered Satellite Service Providers and General Instrument.

STATE	NUMBER OF TV HH	BASIC CABLE SUBS	DTH SUBS	% OF HH WITH CABLE	% OF HH WITH DTH
Nebraska	616,690	386,854	34,335	62.73%	5.57%
Nevada	554,060	332,311	21,006	59.98%	3.79%
New Hampshire	416,070	310,277	14,306	74.57%	3.44%
New Jersey	2,838,110	2,067,172	18,685	72.84%	0.66%
New Mexico	578,710	309,130	25,140	53.42%	4.34%
New York	6,575,640	3,935,826	125,664	59.85%	1.91%
North Carolina	2,685,580	1,516,316	173,102	56.46%	6.45%
North Dakota	242,130	143,336	13,222	59.20%	5.46%
Ohio	4,196,420	2,423,309	112,029	57.75%	2.67%
Oklahoma	1,234,500	684,106	69,515	55.42%	5.63%
Oregon	1,181,240	636,466	52,611	53.88%	4.45%
Pennsylvania	4,558,630	3,233,475	104,534	70.93%	2.29%
Rhode Island	376,860	280,058	4,442	74.31%	1.18%
South Carolina	1,332,250	758,179	79,189	56.91%	5.94%
South Dakota	268,200	150,998	17,908	56.30%	6.68%
Tennessee	1,960,650	1,076,614	112,731	54.91%	5.75%
Texas	6,475,270	3,066,987	248,085	47.36%	3.83%
Utah	585,310	261,789	24,631	44.73%	4.21%
Vermont	214,210	122,468	22,253	57.17%	10.39%
Virginia	2,415,260	1,468,593	110,545	60.80%	4.58%
Washington	2,019,860	1,185,168	73,028	58.68%	3.62%
West Virginia	695,860	473,140	44,610	67.99%	6.41%
Wisconsin	1,894,920	973,323	66,303	51.36%	3.50%
Wyoming	175,590	120,858	17,740	68.83%	10.10%
Alaska	154,160	81,916	7,213	53.14%	4.68%
	95,362,730	56,119,269	3,220,466	58.85%	3.38%

Number of TV Households from A.C. Nielsen, Television and Cable Factbook, 1995. Basic Cable Subscribers from Warren Publishing, Inc., Television & Cable Factbook, 1995. Number of DTH Subscribers supplied to SkyTRENDS by C-Band, Medium-Powered and High Powered Satellite Service Providers and General Instrument.

Might NVOD/VOD Beat Blockbuster?

Did H. Wayne Huizenga give up on **Blockbuster** because he was worried how its core business of video rentals would fare against the creeping threat of NVOD?

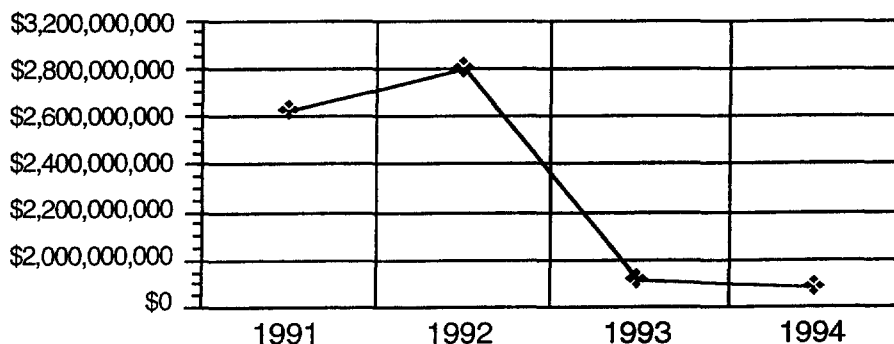
The latest news from Europe – where home satellite systems are better established than in the U.S. – seems to support this idea. The once-hot retail video rental market has stagnated, as evidenced by last year's retail rental sales revenue reaching a four-year low of \$2,088M – an annual decrease in revenue in excess of \$911M. The decreases are consistent with 1993 – the year the industry first began to tumble.

Meanwhile, with the DTH and cable markets both hot right now, more and more Western-based entertainment companies are providing alternatives to video rental.

To wit: **Walt Disney Co.** and Luxembourg's **CLT SA** plan to launch **Super RTL**, a new children's channel, marking Disney's first venture into German TV.

Additionally, **Playboy Enterpri-**

European Video Rental Retail Sales Revenue



Data courtesy of ScreenDigest (44-171-580-2842) in London, England.

ses will launch a new European channel, **Playboy TV**, in conjunction with **British Sky Broadcasting** and **Flextech PLC** (of which 60% is owned by **TCI**). **Hughes Network Systems** has also installed a GMH 2000 digital wireless system in Prague.

But competition is not coming strictly from the U. S. – new television services being launched by European companies are also hurting the video rental industry.

Three new Spanish TV networks (**Canal Plus**, **Tele 5** and **Antena 3**)

have virtually halted that country's rental market. The estimated 8,000 movies being broadcast by Spanish TV each year has definitely impacted rental sales.

The Czech Republic faces competition from the new **Nova TV** network, and Belgium's successful **VTM** has added to a crowded TV market in that country.

And in a trend that should have **Frank Biondi** worried, British viewers spent more money on satellite and cable subscriptions than on video rentals in '94. •

Inside

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- **EQUIPMENT**
Latest Shipment Totals 6
- **DSS PROJECTIONS**
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- **PROFILE**
Satellite Industry Association 10

Cable's Conundrum:

Confused Analysts Wander NCTA Halls Trailing Stats On Growth, Investment, Competition & Convergence

Amid the hoopla of May's **NCTA** convention – with its backslapping, vapor-ware, Texas-sized attendance – came the word from Wall Street. A dark undercurrent in neon corridors, many of the market watchers who spoke at the Dallas show declared themselves confused – and somewhat concerned – about cable's future.

This is not to say that DTH proponents should begin dancing in the aisles. The monopoly-fed, 61.4-million subscriber coaxial empires are heavily favored to retain their biggest-business-on-the-block stature. And many industry insiders, like **Chris Dixon**, managing director of communications research at **Paine Webber**, believe that "over time, the broadband will win." (• See Page 2)

Cable Growth Slows to 6.5% a Year

(From Page 1) But, Dixon warned at a Wall Street on Cable panel, "Digital can make the interim very cloudy" for cable while also allowing DBS to garner handsome profits from relatively small pieces of cable's once-exclusive pie.

This cloudy scenario – filled with questions of convergence, competition, capital concerns and commoditization – is reflected in the market's current apathy toward most cable stocks – an apathy which many expect to last for some time.

Morgan Stanley Principal **Rich Bilotti**, speaking on a panel discussing the future of communications' businesses, pointed out, "Cable used to grow at a rate of about 12% to 13% a year. Now they are doing about half of that." To regain their Wall Street darling status, Bilotti suggested, the cable companies must push their growth to 10% or better.

But that, the analysts agreed, is not necessarily an easy task. According to Bilotti, a key factor in cable growth will be the addition of near-video-on-demand (NVOD).

Citing a recent Morgan Stanley consumer study, Bilotti noted that approximately 70% of television viewers would like to get the multiple-movie-showings service which has proved immensely popular for DTH's **DIRECTV**. However, he added, balance sheet problems are likely to separate NVOD and cable customers for several years.

Namely: With NVOD and other much-promised interactive services depending on pricey (between \$800 and \$1000 per customer), difficult-to-develop technologies, cable is still several years away from catching up to home satellite's capabilities.

What's more, cable companies are determined to enter the telephony business. As *Decker Anstrom* said, "With or without legislation, we're getting into the phone business."

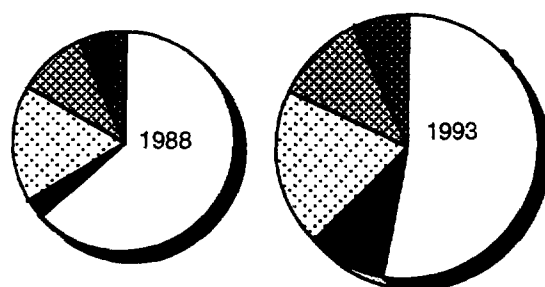
Which suggests that current cable customers will fall even lower in the capital outlay priorities. Unless, of course, Congress allows cable

Consumer Spending
And Other Good News on

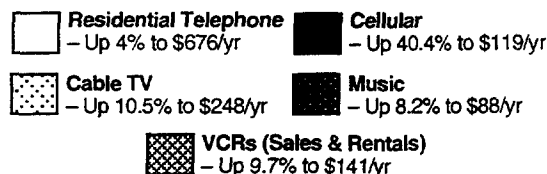
Near-Video-On-Demand

Even without ballooning DTH figures, consumer telecommunications and home entertainment spending just keeps on growing. In 1988, consumers spent an average of \$556 annually on the services listed below. By 1993, that figure had ballooned to \$676. Of the mix, VCR sales and rentals soared from \$88 in 1988 to \$141 in 1993.

Herein lies the good news for DTH. According to **Rich Bilotti** of **Morgan Stanley**, the firm's recent consumer survey reveals that 70% of all homes would eagerly switch from VCR to NVOD as the services become available.



**Spending Growth
1988 - 1993**



(Data from Morgan Stanley & Co., May 1995)

Participants

Level 1

Chaparral Communications

CSN

Discovery

The Discovery Channel

EchoStar

ESPN

ESPN

General Entertainment

Grand Prix Network

Group W

ITN

International Family Entertainment

James S. Brown Communications

Liberty Sports

MTN

NBC

PRIME-TIME

PrimeTime Live

Rainbow/ABC

ShoTime

Southern Satellite

Superstar Entertainment

Thomson Consumer

Electronic (CA)

Tuned-In Marketing

USA Network

WGN

Level 2

A&E

Channel Master

MSI Eagle Satellite

Galaxy

Odum Antennas

Parade

Pro Sound Systems

Satellite Direct

Hidden

Warren Supply Co.

Zeus Electronics

AT&T

California Amplifier

Earth Terminal

KTI

Orourke Brothers

Perfect 18

R.L. Drake

Toshiba

Universal Antennas

Winegard

Cable on Customer Service, DBS, et al. (Round #971)

Here we go again... Amid paroxysms of self-congratulation, the cable industry used Dallas as a background to play its customer service initiatives up and DBS' down.

Time Warner had great stats on customer service from its New York city system to report as new policies, implemented in June 1994, have significantly boosted approval ratings. With next-day, on-time appointment ratios of 99.8% and 99.2% respectively, the system's good-to-excellent ratings from customers grew from 29% of those polled in January '94 to 55% 10 months later.

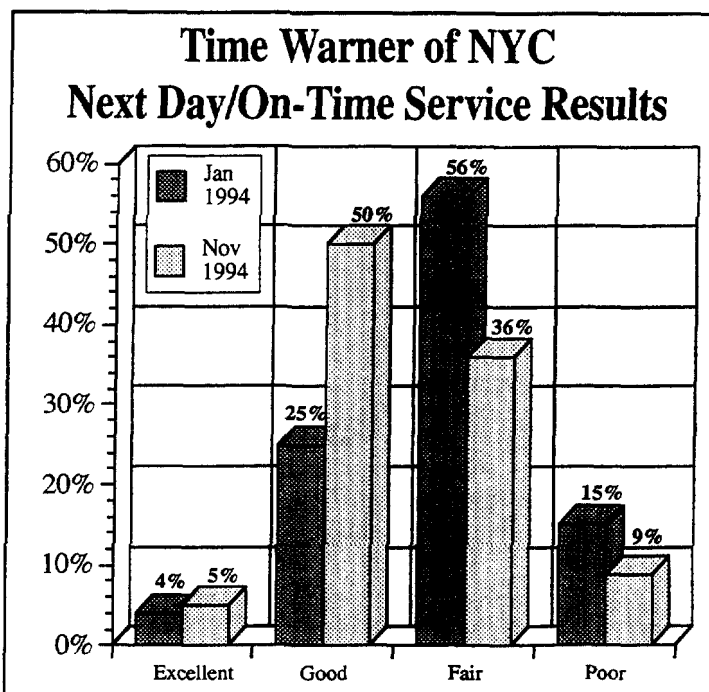
Naturally, these figures played prominently at the show. However, approval ratings for the industry as a whole fell far short of the Time Warner reports. For example, according to a **Cable World/Talmey-Drake Research & Strategy Inc.** poll, approximately 25% of cable's customers are aware of the industry's On-Time Guarantees – but nearly 70% of those expect the companies to try to weasel out of the guarantee.

The poll also showed little change from 1991 to 1995 in the 40% of customers who think their cable system's customer service has either deteriorated or not improved. Nearly the same number thinks their service has improved, while about 20% of customers either don't know or aren't sure.

Disquiet was mixed with denial regarding the subject of DBS. At a standing-room-only panel moderated by **Media Business** President *Paul Maxwell*, the mood could best be described as intensely subdued.

The crowd listened quietly as **EchoStar's** *Charlie Ergen* said the DSS services are getting half their subs from cabled areas and drawing about \$50 a month per sub. **AlphaStar's** *Murray Lippenstein* made clear that **Tee-Comm's** U.S. service may be a real contender with its **AT&T** satellite and new investment bankers.

PRIMESTAR's former president, *John Cusick*, pooh-poohed cable's supposed interactive advantage



by noting that the current DBS services have built-in modems capable of offering all but 5% of expected interactive applications in the next 5 years. The session ended with few questions from a grim crowd.

However, while disquiet creeps in, denial remains strong – and cable publishers seem determined to keep it that way. The **Cable World/Talmey-Drake** poll, for example, included several questions on DTH – all clearly designed to elicit a negative response. (A sample: After asking questions establishing the importance of local broadcast channels, the poll asks whether the consumer would pay \$700 for a satellite system that did not provide these channels.)

Needless to say, the study found little of interest in DBS. •

Analysts Question Telephony's Entrance into Cable

(From Page 2) companies to raise rates for the purpose of improving their infrastructure – a boost which **Merrill Lynch**, ever bullish on cable, expects to see happen.

Telephony's entrance into television fared even worse in analysts' opinions. Despite the telephone companies' overflowing coffers, most analysts agreed that the Baby Bells lack the creativity needed to succeed in the entertainment business.

In fact, *George Colony* of the technology consulting firm **Forrester Research Inc.** suggested in a

recent **Wall Street Journal** article that the telcos "and their stockholders could be taken to the cleaners" on recent entertainment deals.

In addition, the Bells' video dial tone is fast receding as both **Bell Atlantic** and **U.S. West** have recently withdrawn their applications with the FCC.

All of which leaves DTH, and to some degree wireless cable, looking at an excellent window of opportunity. Said *Dixon*, today's entertainment wars are "all about who gets digital" – and DBS already has it. •

*And the tear that we shed,
though in secret it rolls,
Shall long keep his
memory green in our souls.*

– *Thomas Moore*

**In Memory Of
GORDON MAIN
April 1931 - May 1995**

DECEMBER 1992
THROUGH
MARCH 1995

Family Entertainment, Premium Channels Lead C-Band Growth; Greed Guts Sports

While DBS services make the most of their heavy sports draws, the picture is quite different on the C-Band side of DTH.

Sports programming ranked #1 in C-Band subscriptions growth from December 1992 through March 1995 (at an overall 257% expansion rate, with an average of 9.5% per month). However, new sports subs have dried up in the past six months as growth has dipped well beneath 1%.

Industry observers generally pin the blame for sports programming's struggles on the baseball players, hockey players and team owners who have all recently ended their strikes and lockouts with the blithe assumption that "the fans will always come back."

The fans didn't come back, notes *Todd Merkow*, director of affiliate sales and programming with **Liberty Satellite Sports**. "We usually see a significant lift at the start of baseball season as renewals come in," he says, "but that hasn't happened this year." The drop-off in subscriber growth leaves sports programmers with just 5.1 million subscriptions on the traditional dish – the smallest count of all services. (With 2,308,108 authorized C-Band dishowners, each household subscribes to roughly 25 different services.)

Meanwhile, C-Band continues to be a hot spot for family entertainment. Overall, family-oriented subscriptions grew 231% from December 1992 to March 1995, and the services netted a 4.93% expansion in the last three months of this period.

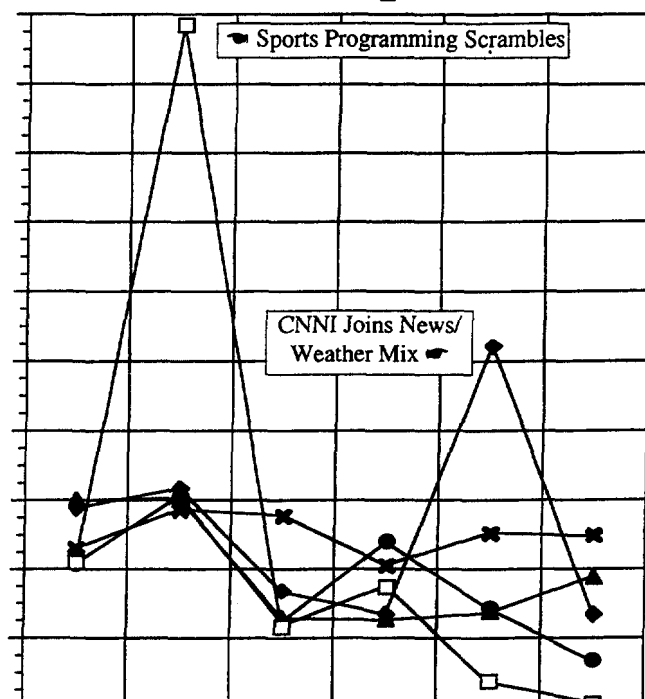
Most observers believe that the family entertainment category has fared this well due to a nationwide turn to the right, exacerbated by the blood-and-guts news and movies of the 1990s. As *Doug Stuart*, director of research for **The Family Channel** says, "Viewers are increasingly concerned about violent and offensive programming content and its effects on their families and children."

The rapid expansion of the family category is all the

more significant when total numbers of subscriptions are considered. By the end of March, the mostly G-rated services had 27.284 million subscriptions – by far the biggest piece of the C-Band pie.

News and weather takes second place in overall growth from December 1992 to March 1995 (between sports and family entertainment). With a 236% sub increase during this period, this category finished 1995's first quarter with a total 5.621 million subscriptions. Premium services expanded by 176% in the same time period, ending with 5.751 million subs. Superstations finished last in overall growth, increasing its subscriber base by 160% to reach 14.494 million.

Overall GI Subscription Growth



Data Note:

Please note that the time periods on this chart are not all the same. The first two periods cover 6 months each; the second two cover 4 and 5 months respectively; and the last two periods cover three months each.

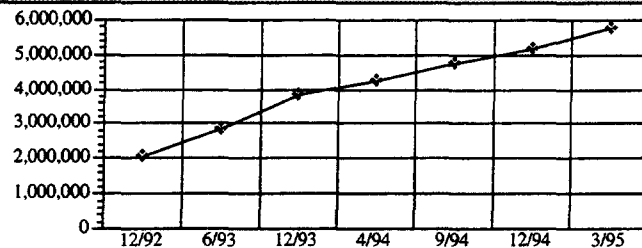
Data from General Instrument Inc.

- ✕ Family Ent
- Superstations
- ▲ Premium
- ◆ News & Weather
- Sports

Subscription Growth By Category

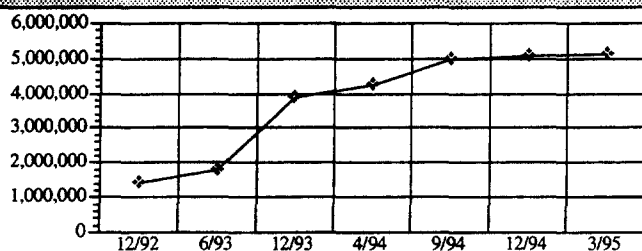
1. PREMIUM CHANNELS

—Showtime, HBO, Max, Playboy, Disney, Fox, Spice, First Choice, Flix, Fantasy, Spice2, Capital, RDC, SEVEN, ETC, TMC, XXXTREM, Las Vegas TV, Adam & Eve, CLIMAXX, Flix.



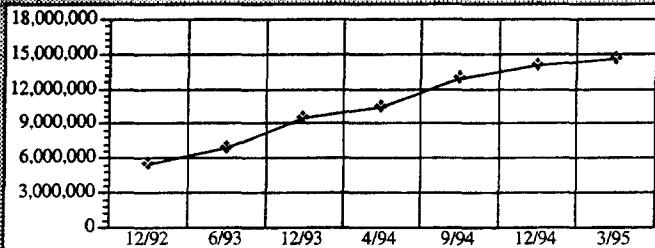
2. SPORTS

—Regional Sports Networks (Sports Channel, SSN, Prime, HSE), ESPN, ESPN2, ESPN GFA, Football, NFL, Midwest Sports Channel, Madison Square Garden, Sports South, The Golf Channel.



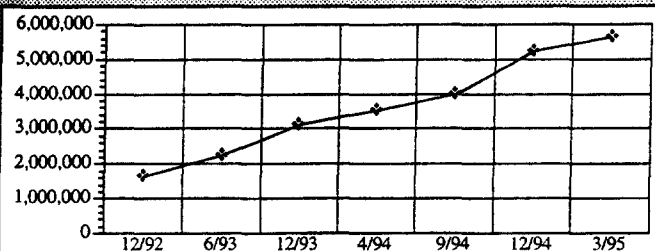
3. SUPER STATIONS & NETWORKS

—Netlink, NBC, CBS, ABC, KIMA, WGN, KDVR, WPG, WUSA, WWBZ, WISN, Superstar, KTLA, KTVT, WPIX, WGN, WIAL, WXIA, WABC, WFLD, KOMO, KPDL, KNSD, WOR/WSBK.



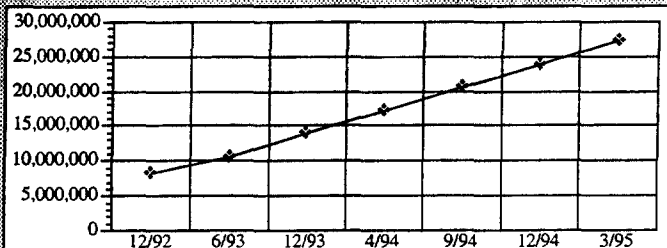
4. NEWS AND WEATHER CHANNELS

—All News Channel, CNN, CNN International, Real Line News, The Weather Channel, CNBC, The Travel Channel.

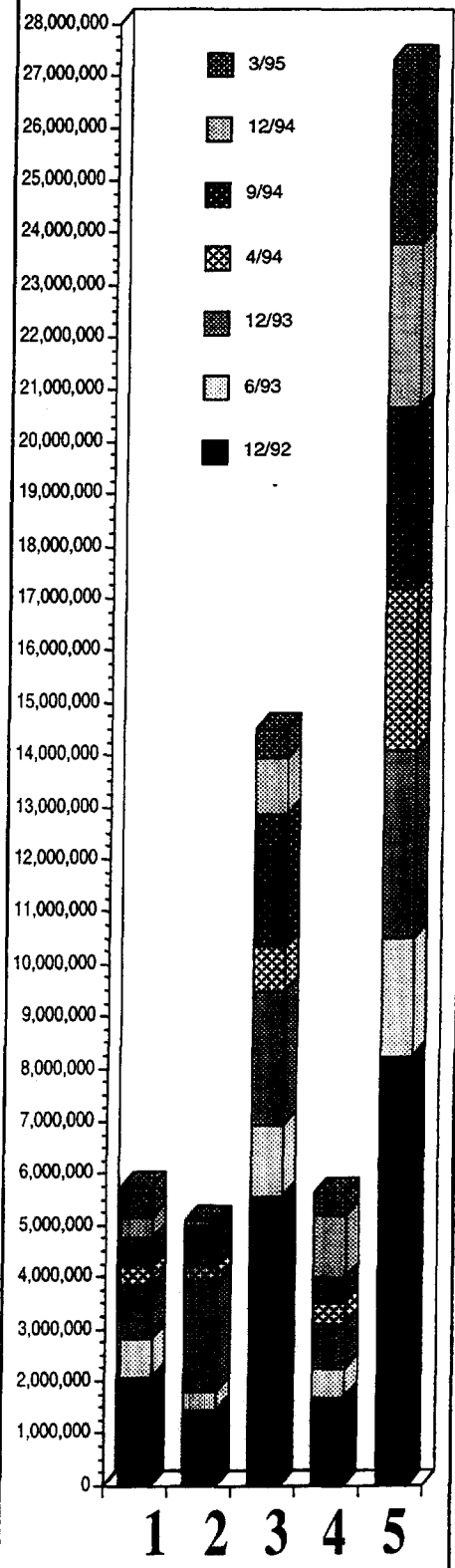


5. FAMILY ENTERTAINMENT

—MTV/VH1, Nickel Comedy Channel, Fox, ABC, USA, Family Channel, Discovery, Lifetime, ETC, Bravo, Nickelodeon, Int'l Channel, Euron Channel, GME, etc., TCM, Gears, Independent Film Channel.

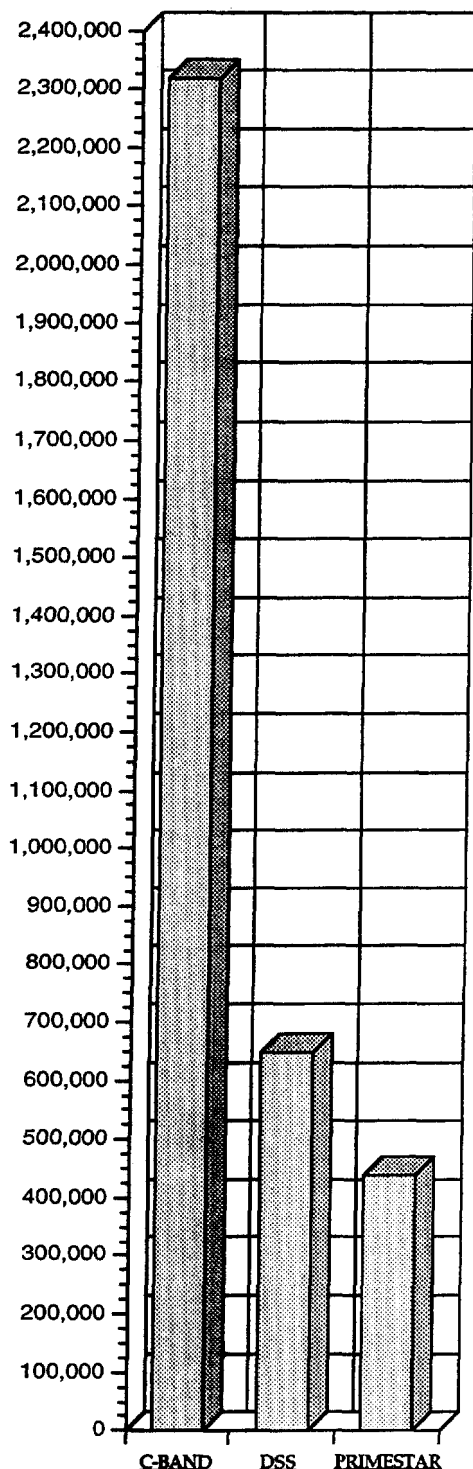


Total Subscriptions By Category



DTH Sales Down Again in April:

SUBSCRIBERS



The muddy month of April brought gloom to the C-Band industry as systems shipped slipped to their lowest levels since February of 1989. While new C-Band subscribers dipped below 22,000, DSS proponents fared a bit better as the **USSB/DIRECTV** service grew to some 600,000 subscribers*, an approximate 10% hop over March estimates.

However, April bloomed for **PRIMESTAR** as subscriber numbers grew to an estimated 400,000*, an approximate 28% leap over March.

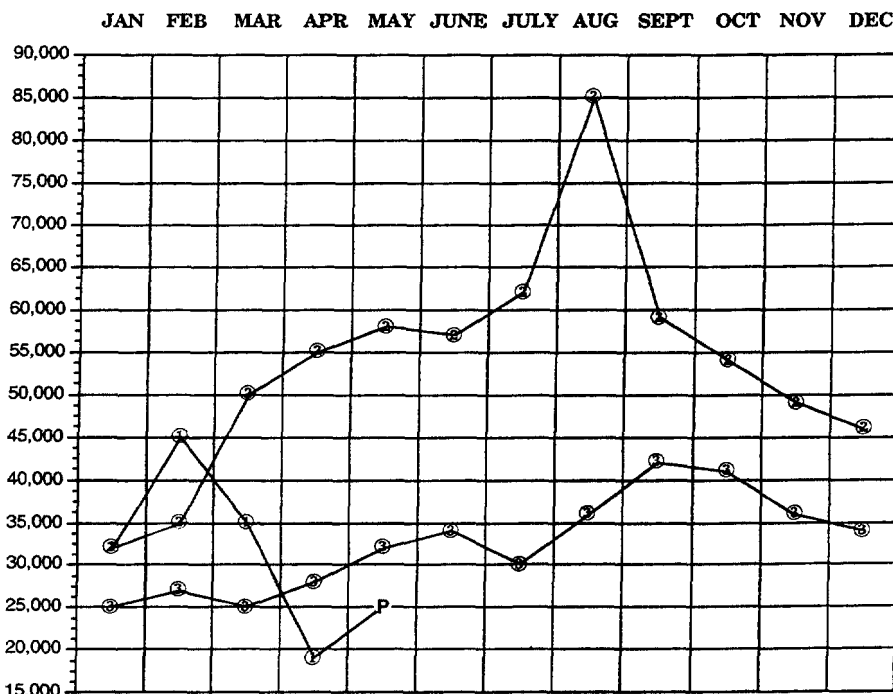
In all, the month ended with a total of 3.3 million DTH subscribers or about 3.5% of all television households.

scribers or about 3.5% of all television households.

Preliminary numbers for May show that **PRIMESTAR** has continued its boom, ending the month with some 435,000 subs.

According to company Senior VP *Don Herr*, the boost in numbers is largely due to **PRIMESTAR/TCI** and particularly the work *Toby DeWeese* has done with TVRO dealers. Meanwhile, **General Instrument** reports net authorizations of 2,308,108 as of May 31. While the month's gross authorizations were about normal (some 30,000), deauthorizations totaled 20,000. GI has searched for evidence of piracy, but nothing has surfaced so far.

3-YEAR SYSTEMS SHIPPED



	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
1995	32,000	45,000	35,000	19,000	25,000							
1994	32,000	35,000	50,000	55,000	58,000	57,000	62,000	85,000	59,000	54,000	49,000	46,000
1993	25,000	27,000	25,000	28,000	32,000	34,000	30,000	36,000	42,000	41,000	36,000	34,000

Worst Hit Is C-Band; DSS Slows; Only PRIMESTAR Soars

Naturally, the lows of early 1995 weigh heavily on industry insiders, who generally offer one of two explanations for the drop:

#1 - DBS Did It: Ever since the Hughes DBS-1 bird went up, mutterings of DBS doing in C-Band have haunted the direct-to-home industry. And with DBS numbers nearing one-third of C-Band subscriber totals, the fear that product line expansion will lead to intra-industry cannibalization has intensified among those with C-Band-only products and services. (This feeling may swell in the future if, as some suggest, **Toshiba** and **Uniden** drop their C-Band products when they move to DSS.)

As usual, GI is painted as a key

villain of the DBS-did-it scenario, with module pricing again at the center of debate. (For those new to the industry, the basic argument here centers on the fact that GI, the only producer of the modules necessary for subscription programming, has yet to lower its price, a move that many believe would help boost C-Band sales.)

What GI has done is fund a \$15-million ad campaign for '95. By sending a full-view message, the company hopes to increase interest in the traditional dish and to produce leads for retailers across the country.

By mid-May, the campaign had received more than 45,000 consumer calls in its telemarketing

center. A recent poll conducted by GI determined that 13% of the qualified callers actually bought a home satellite system. Unfortunately, 60% of those chose DBS equipment over C-Band. If the poll results hold true for the remainder of the campaign, then some 10,400 C-Band systems would be sold from a goal of 200,000 inbound calls.

Considering that GI is funding this campaign without mentioning its own product, 10,000-plus sales would be a nice industry bonus.

However, when it comes to the ad drive, **Dave Robison** of **DSI** says, "I think that program was put out so as not to lower the module prices, which is what the industry really needs."

Indeed, this comment leads to what many consider the major culprit of lethargic C-Band sales:

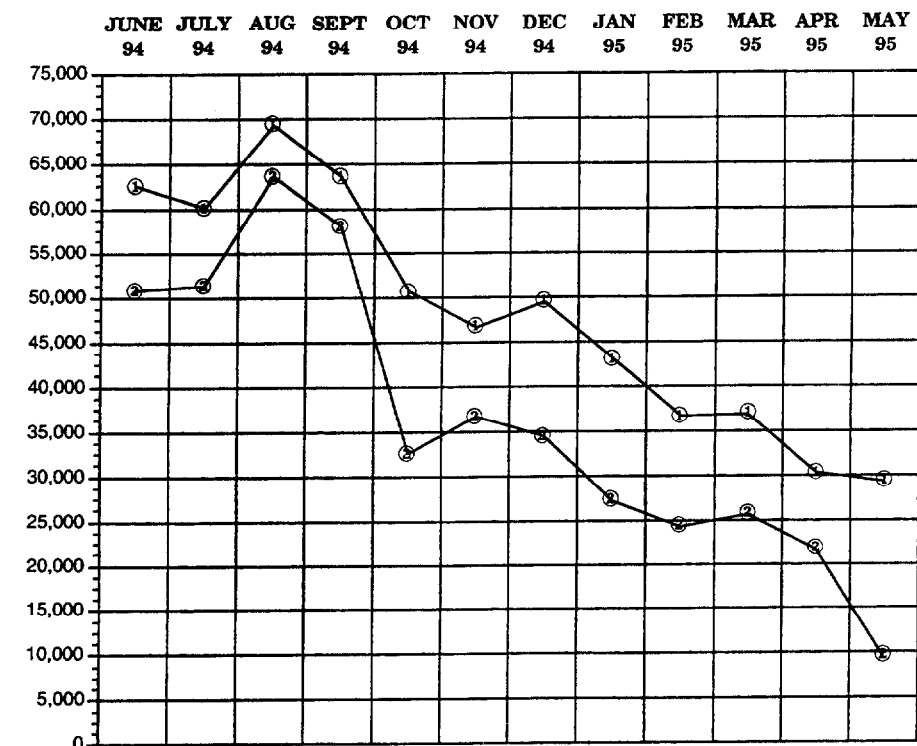
#2 - Consumers Are Putting Off Big Ticket Purchases: Under this theory, the home satellite industry is caught in a nationwide consumer electronics/major appliance downturn. Big ticket appliances, color televisions, laserdisc players and several computer categories all suffered through a dismal April. According to **Twice** magazine, core appliance shipments dropped 13% in March, and numbers, along with most CE categories, were down again in April.

This early-year turnaround is typical of consumer electronics products, which DSS sales closely mirror. In addition, several observers suggest that C-Band may be moving into a more consumer electronics cycle itself.

These factors, plus higher levels of consumer debt, climbing interest rates, increased global volatility (particularly in Mexico) and general consumer unease over the low U.S. dollar, are fingered as potential culprits.

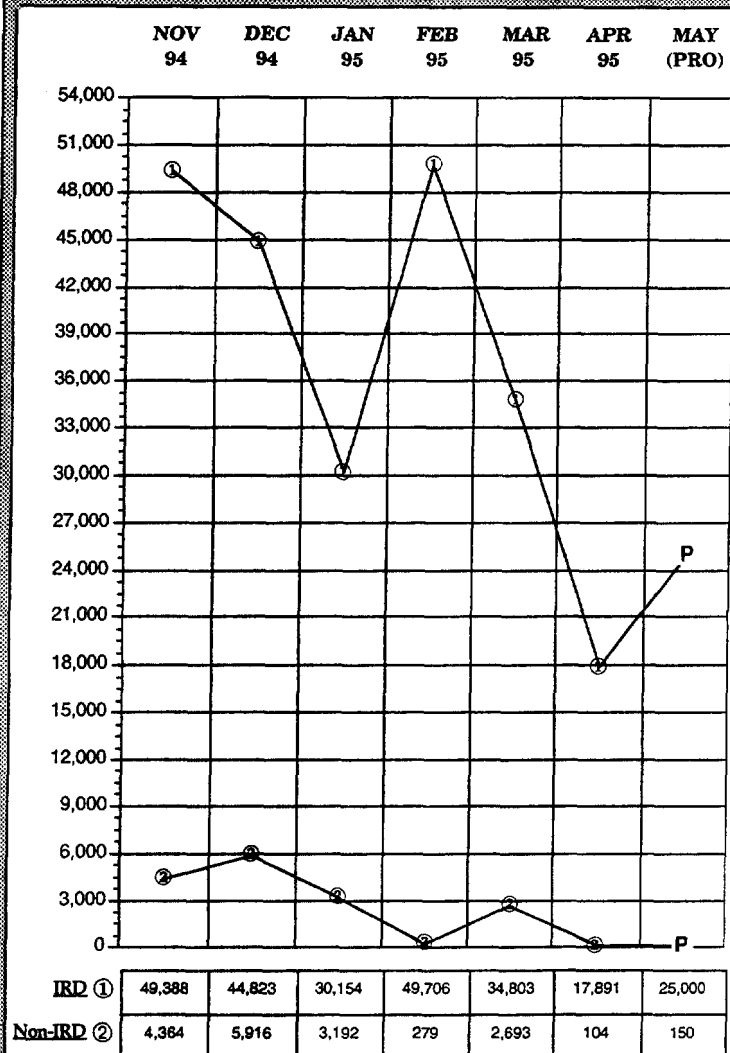
In fact, **Jerry Throgmartin**, president of the highly-regarded **NTAM Buying Corpora-** (See Page 8)

GROSS & NET NEW AUTH.

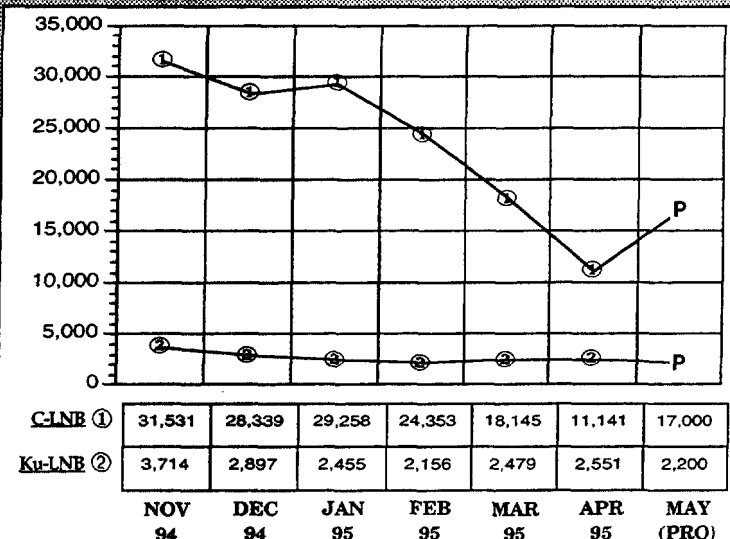


① Gross New Auth	62,497	60,054	69,320	63,568	50,559	46,670	49,465	43,013	36,612	36,836	30,213	29,287
② Net New Auth	50,770	51,294	63,576	58,006	32,500	36,581	34,372	27,203	24,279	25,694	21,688	9,593

RECEIVERS



LNBS



The DBS Battleground: Jockeying for Position & Paying the Piper

(From Page 4) **tion**, recently noted, "This year will be a little tighter year than last year."

Executives at **DIRECTV** say the current downturn was anticipated. Following the consumer-electronics model, DSS sales are expected to pick up again in July and August, perhaps experience a slight dip after that to end the year strongly, and then reach DIRECTV's long-projected 1.5 million subs.

In other DBS news:

● **Sony**, which introduced its three models of DSS consumer equipment in early May, expects to have national distribution of its most basic \$749 model by mid-July with national distribution of the \$849 and \$949 models by mid-August.

● **EchoStar** continues to move forward on its BSS service slated to begin later this year. Most recently, the company announced an IPO aimed at raising money for the service. Since the original filing, however, **Charlie Ergen** has successively lowered the DISH offering from the original 5 million to 4.5 million and then to 4 million. EchoStar may use proceeds of its DISH stock to find a new launcher if China's **Great Wall** can't meet its schedule.

Although some observers have long questioned EchoStar's ability to get its service up and going, we note that - like the well known bunny - Ergen just keeps on going.

● Meanwhile, Canada's **Tee-Comm** electronics has announced plans to sell 40% of **AlphaStar**, its FSS system planned for the U.S. At the moment, however, AlphaStar is under attack at the FCC. Understandably cranky at the hoops and hurdles which the Canadian government has thrown in the path of its Canadian **PowerDIRECT** service, DIRECTV has protested the Canadian company's foray into U.S. markets.

Recently, however, the Canadian government has moved toward letting PowerDIRECT fire up in Canada, which may mute the protest.

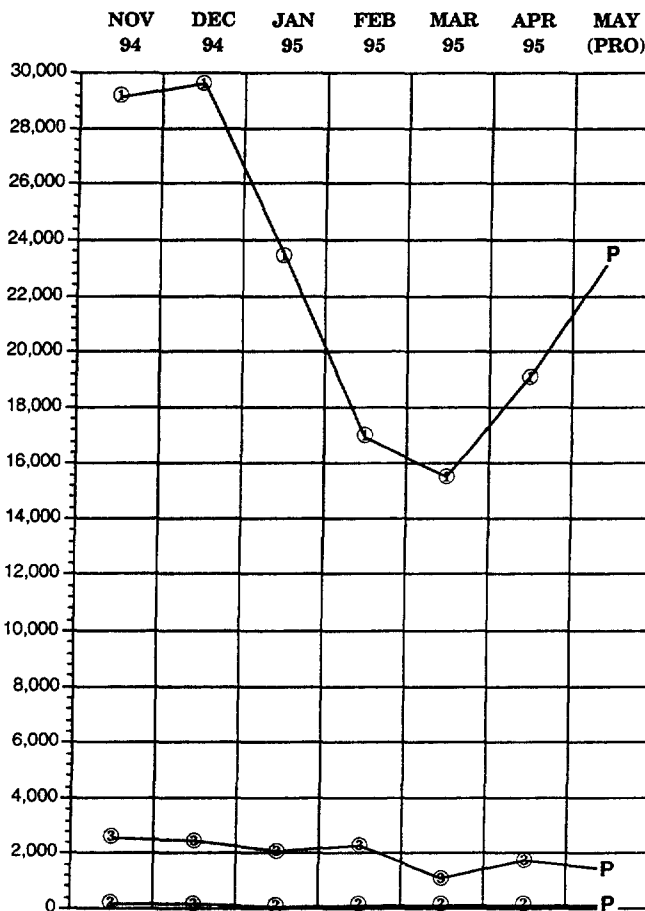
● A Tee-Comm Canadian DBS service.

● **ExpressVu** (which is jointly owned by Tee-Comm, **BCE Inc.**, **WIC Western International Communications Ltd.**, and **Canadian Satellite Communications Inc.**) intends to launch by September 1 despite a government order requiring it to first obtain a license. Since the government originally told ExpressVu it did not need a license to proceed, company lawyers have declared the order illegal and are pushing forward to grab the first-in-the-sky advantage.

● As for the **ACC** satellite slots which the FCC yanked in mid-April, nearly every DBS com-

FEEDHORNS

ANTENNAS



C Band ①	29,151	29,617	23,424	16,967	15,515	19,054	23,400
Ku Band ②	187	147	71	123	116	126	3,000
C/Ku Band ③	2,579	2,444	2,067	2,298	1,095	1,742	1,400

pany we can name is interested in getting their hands on the transponders. **PRIMESTAR**, which had intended to use the capacity via TCI's **Tempo**, is putting up a tough battle to retain the space. Most recently, it, **Tempo**, **General Instrument**, **CATA** and **Advanced** filed protests with the FCC. •

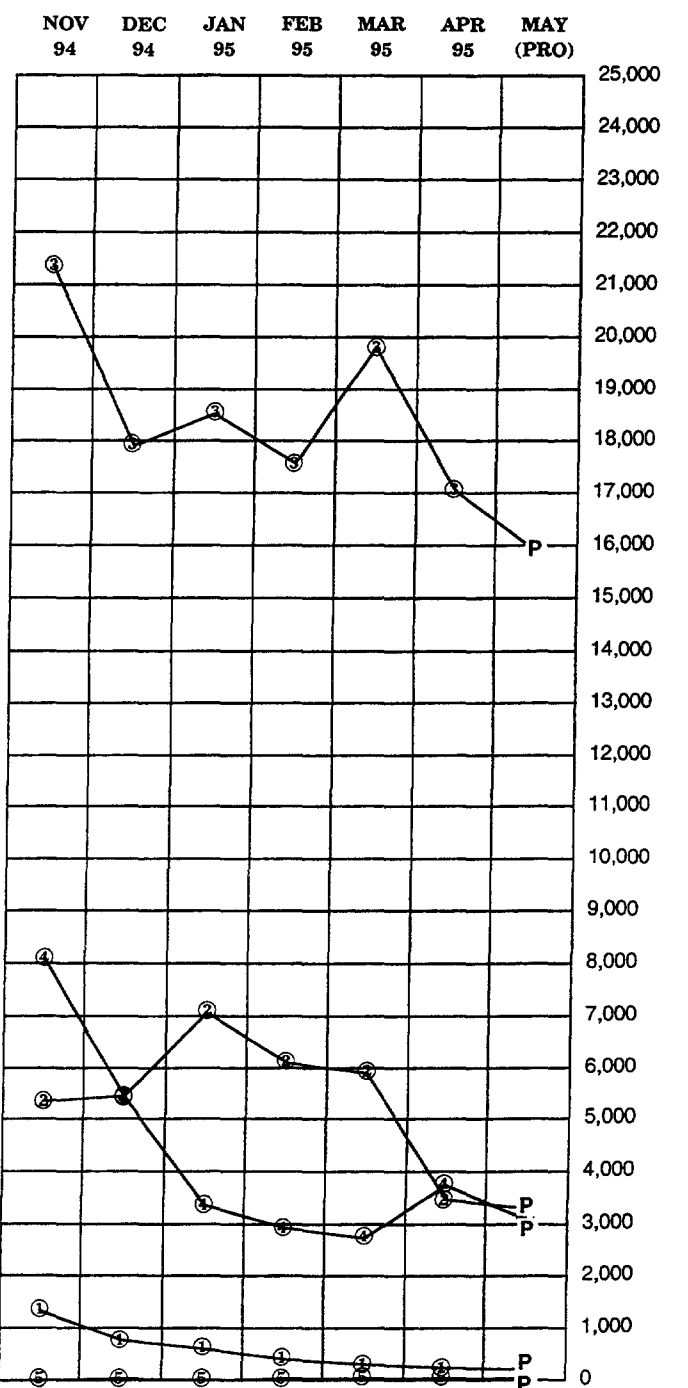
Buying Power

If home satellite systems were MSO's, their rankings would be:

- #3 - C-Band with 2,308,108 subs
- #23 - DSS with 625,000 subs*
- #29 - PRIMESTAR with 435,000 subs*

(Data from GI, DSS programming providers, PRIMESTAR and the CAB, 1994 CableTV Facts book.)

*SkyREPORT estimates



1,346	755	610	396	292	221	190	① >10 Foot
5,346	5,445	7,067	6,100	5,902	3,468	3,300	② 10 Foot
21,355	17,930	18,526	17,564	19,784	17,057	15,900	③ 7-7.5 Foot
8,093	5,417	3,364	2,934	2,751	3,749	3,100	④ 6 Foot
0	8	3	19	34	36	10	⑤ 5 Foot

SIA Holds First Meeting, Elects Officers

Association Will Promote Technologies & Applications

In an inaugural meeting in late May, the nascent **Satellite Industry Association** began making plans for its future.

The association's main goal, according to Chairwoman *Penelope Longbottom*, will be to focus on national and international regulatory and policy issues confronting the commercial satellite industry.

At the meeting, the association split membership categories into three tiers: Executive (\$15,000 in dues includes voting privileges), Affiliate Executive (\$10,000 in dues, non-voting, but members will receive SIA show benefits and SIA communications) and Associ-

ate (\$5,000 in dues aimed at educational and non-profit organizations).

Among the priorities pinpointed by the SIA as areas to develop were spectrum availability, cost of user fees, and the inclusion of the issues affecting members in talks at the International Telecommunications Union (ITU) meeting held in Geneva this fall.

The board also approved the creation of a senior-level administrative staff position designed to coordinate board meetings, develop forms of communication between members and attend vital policy hearings. •

PARTICIPATING COMPANIES

AT&T Skynet Services
American Mobile Satellite Corp.
Arianespace, Inc.
GE American Communications
Global Access
Telecommunications
Hughes Communications, Inc.
Keystone Communications
Lockheed Martin
Orbital Sciences Corporation
Orion Network Systems, Inc.
PanAm Sat
Space Systems/Loral

DSS: The Price of Things To Come

Whither DSS prices? If the small dish system follows traditional consumer electronic patterns (as it appears to so far), then prices are headed down, despite **Sony's** upward tick with its \$749 basic model this year. By 1996, however, the downward pressures should start, leaving questions of how much and when.

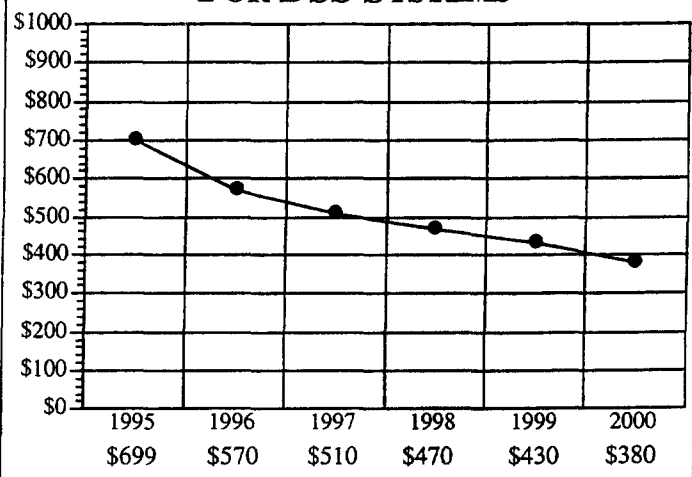
SkyREPORT research, based on **Electronic Industries Association** studies and other factors, predicts that today's \$699 basic DSS system price will fall below the \$600-dollar level next year to eventually reach approximately \$380 by the year 2000.

This five-year, 46% price drop generally reflects the performances of other consumer electronics products. In the most extreme example, after debuting at \$1,533 in 1985, camcorders' average annual retail price tumbled nearly 30% to \$1,094 in 1986; five years later the product sold for \$763. In the VCR market, after starting at an average level of \$528 in 1985, the product dipped to \$264, or exactly half, five years later.

While the price of a complete DSS system should generally mirror the pricing performance of other high-end video products, **SkyREPORT** does not expect DSS' retail price to drop until significant competition is established in both the DBS and DSS-equipment markets.

As noted earlier, this competition should ignite in

SkyREPORT Research PREDICTED AVERAGE PRICES FOR DSS SYSTEMS



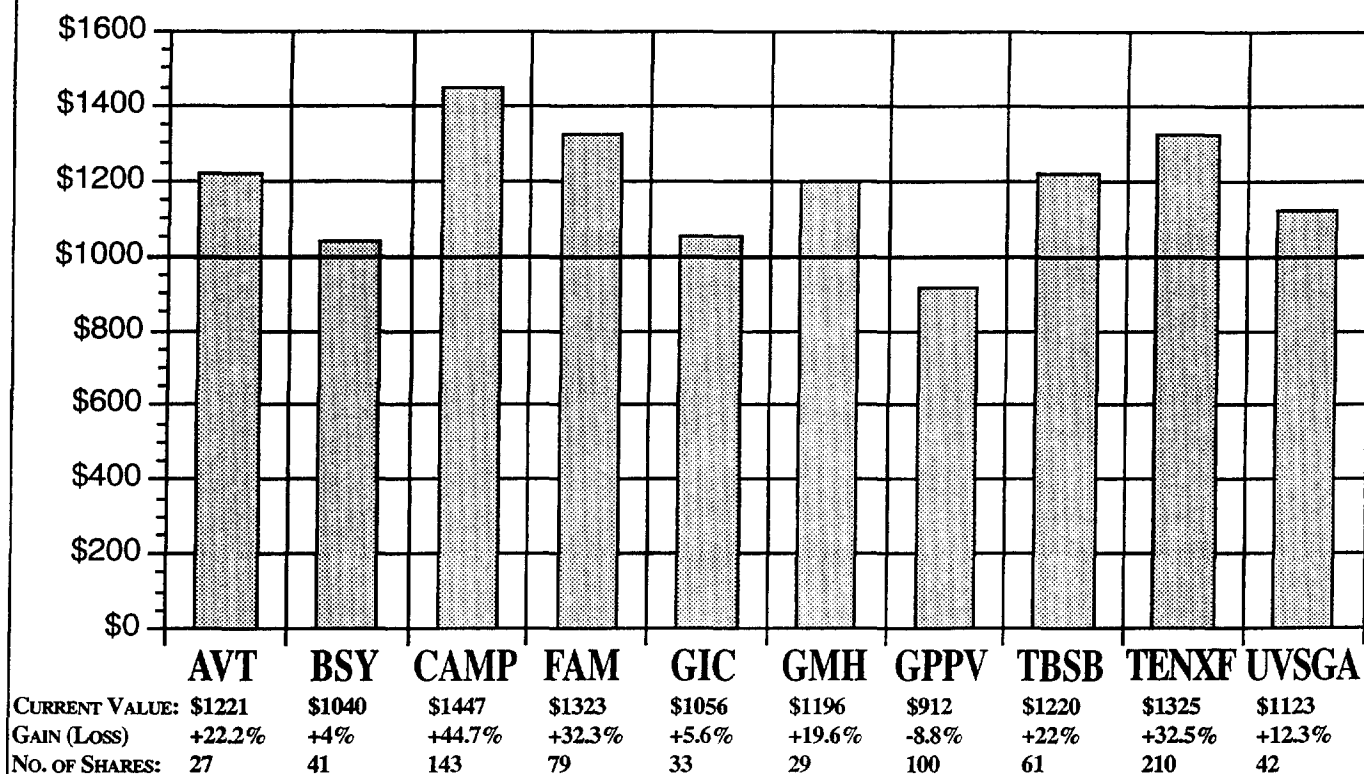
1996 when **Hughes Network Systems** (in early '96), **Uniden** (in mid '96) and **Toshiba** (in mid '96) join DSS production markets and other DBS services (**EchoStar**, **AlphaStar** and - yes, it's still possible - **PRIMESTAR**) begin to offer high-power equipment.

From this point, we expect price reductions to generally follow the trends explained above. •

SkyWatch

\$1,000 Bets: December 30, 1994 – June 2, 1995

For a quick look at how the industry is doing, consider these \$1,000 bets invested in the following 10 public companies at the end of 1994.



SkyTRENDS

A project of the

Satellite Broadcasting and Communications Association

in conjunction with

MEDIA BUSINESS CORP

SBCA President: Chuck Hewitt

SBCA Project Chairman: Scott Weiss,

Speak Easy, Executive VP

Project Director, Evie Haskell

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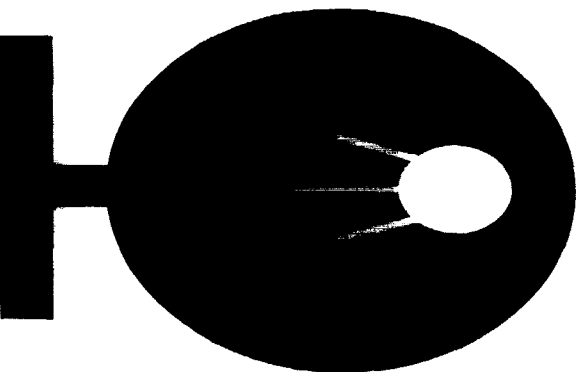
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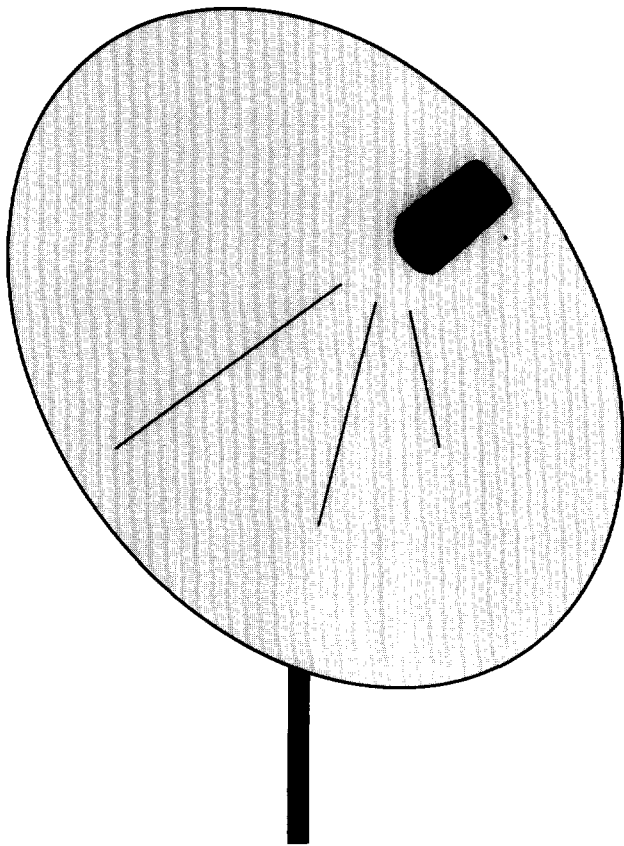
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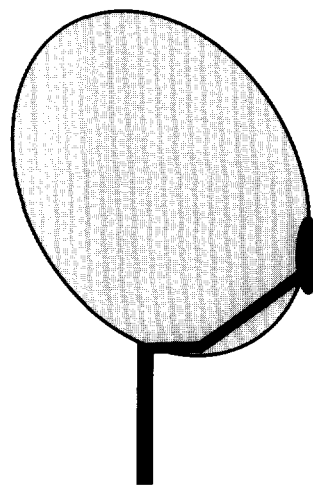
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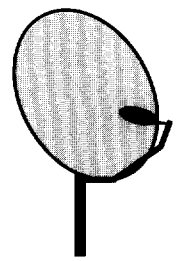
DTH
ANNUAL
REPORT
APRIL '95



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Equipment
Charts



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Analysis

\$3.5 BILLION AND BEYOND 2-3

1995 Looks Like a Banner Year in the Making With Revenues and Subscriber Counts Climbing Off the Charts. A Preview of the Future, a Review of the Past.

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DTH 1995 Outlook: 5M Subs,

Talk about a great start to 1995: In the first three months, DTH subscribers passed the 3 million mark. C-Band services had 2.277M of that; DSS topped 500,000; and the FSS **PRIMESTAR** consortium tipped past 330,000.

Equipment sales quite naturally reflected the ballooning sub numbers. In all, C-Band manufacturers reported shipping approximately 123,500 systems – a near 6,000 improvement over record shipments in first-quarter 1994. In estimates drawn from company statements, DSS sold 200,000-plus new systems in the first quarter while **PRIMESTAR**, via its lease or buy arrangements, added roughly 100,000.

When these figures are assigned dollar figures* and added up, 1995's first quarter – traditionally the slowest period for DTH – jumped past \$750 M in sales. Extrapolate that with industry estimates for 1995 and you have what is widely believed to be a banner year in the making. In all, key industry observers suggest that 1995 sales could top \$3.5 billion while subscribers ramp up to some 5 million.

The 5 million, by the way, comes from the **Satellite Broadcasting and Communication Association's (SBCA)** *Chuck Hewitt* who predicted the multimillion DTH subscriber base at this year's Winter Show in Las Vegas. Of this, **DIRECTV's** *Eddy Hartenstein* and **USSB's** *Stan Hubbard* plan to take approximately 1.5 million (combined); **PRIMESTAR's** *John Cusick* and *Jim Gray* are likely to garner 1 million and C-Band should hold the remaining 2.5M.

While these numbers wouldn't exactly make *The Fortune* 500 swoon, they're remarkable for a former niche business which started with a banged-out parabola in *Tay Howard's* garage and then nearly died in the 1986 scrambling onslaughts. It revived toward the



end of the '80's only to find pirates scaling the masts and questions of legality haunting the decks.

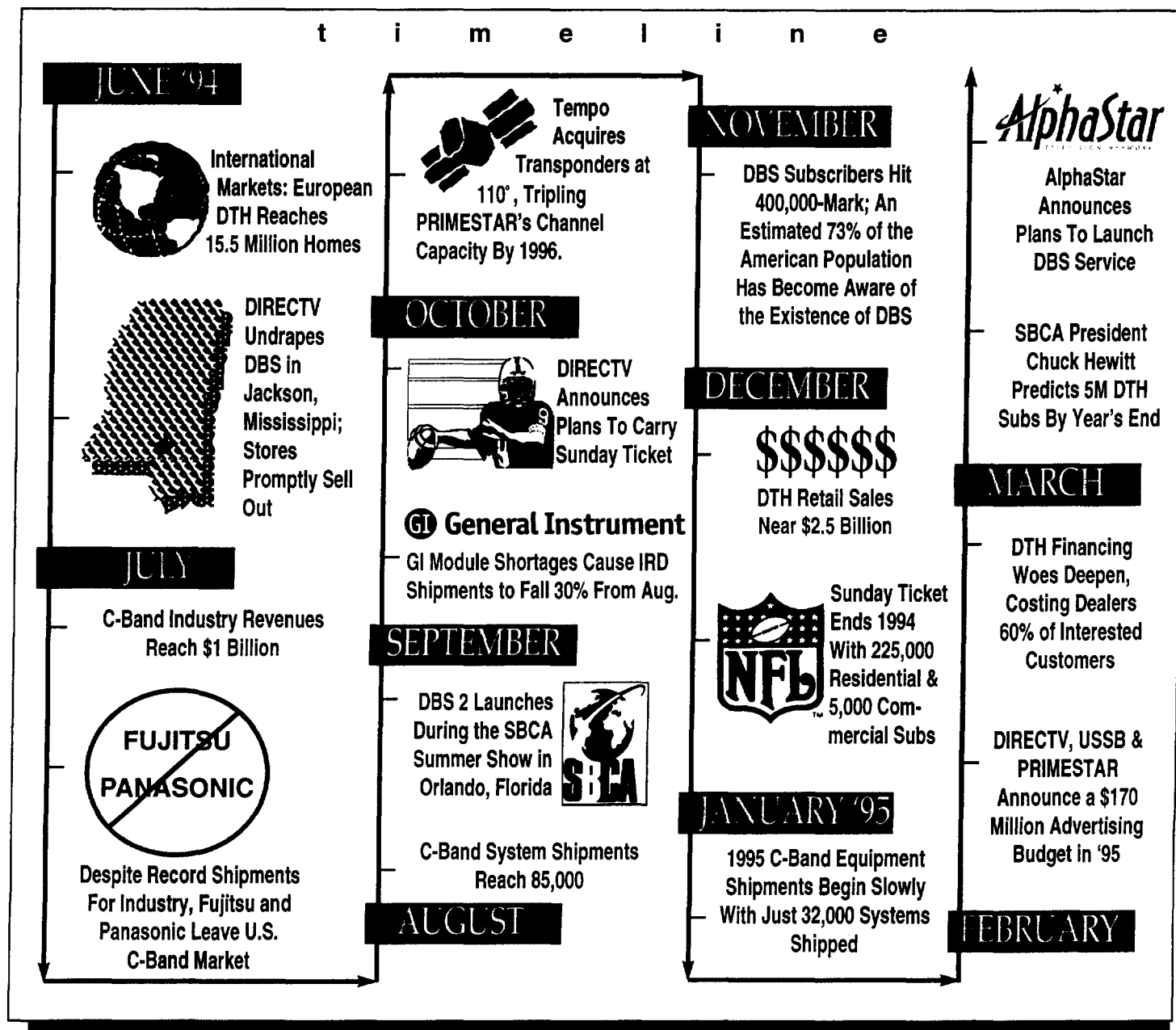
At the end of 1993, the industry had 1,628,000 subscribers and a rural-only reputation.

Then came digital DBS, arriving in mid-1994 via **DIRECTV**, **USSB** and a newly-organized-from-analog-to-digital **PRIMESTAR**.

The hoopla from these new services lit a fire beneath C-band.

Traditional dish numbers soared, peaking at nearly 85,000 systems shipped in August. Even with the three-headed hydra of last fall's module shortages, consumer financing problems, plus the fact that DBS is, after all competition, C-Band has continued strong. Meanwhile **PRIMESTAR** has gained steadily and **DSS** has thrived as a new media wunderkind.

\$3.5B Revenue By Jan 1, 1996



For the months ahead, all DTH entrants plan to keep their momentum pumping with nearly \$200 million in advertising budgets for the major players alone. (GI, the de facto leader of the C-Band side via its proprietary encryption technology, has pledged \$15 million to a C-Band only campaign; PRIMESTAR has announced a \$100 million budget; and DSS players DIRECTV and

USSB plan to spend some \$35+ million each.)

Add to this two new players, **EchoStar** and **AlphaStar**, eyeing the DBS business; research which indicates that DTH is taking some of cable's prime customers; digital C-Band in the offing; and extremely high satisfaction ratings for new home satellite services. Suddenly you have a once sleepy, rural industry transformed into the 60-

million strong cable industry's raison d'être to play Chicken Little. As in:

"EGAD! Competition! The sky is falling!" The sky is..."

(*Retail sales estimates for DTH are calculated using a conservative \$30/-month estimate for all subscribers; \$2000 per system for C-Band and \$1000 per system for DSS.)

1995 Could See DBS, C-Band

From a start at zero (well, **PRIMESTAR** had 70,000 analog subscribers) in June of 1994, the DBS universe ballooned to an estimated 830,000 subs at the end of March 1995. What's more, with exponential growth continuing, the end of '95 should see DBS subscribers climbing above 2.5 million.

Not bad for an industry whose acronym used to be widely interpreted as "Don't Be Silly."

Meanwhile, C-Band's quarterly growth rates continue to hover between 4 and 5%, leading many observers to question not if, but when, DBS will finally outweigh its sister DTH service.

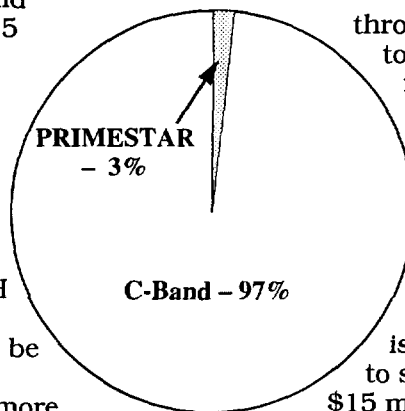
The simple answer to that appears to be early next year. But only a fool would count C-Band out. For one thing, the more traditional "full view" service does have those 2.3 million customers for its scrambled programming – a

nice weighty chunk of which programmers are very fond. (The answer to the perennial question of when analog signals currently used by those 2.3 million folks will be turned off is: not for a long, long time.)

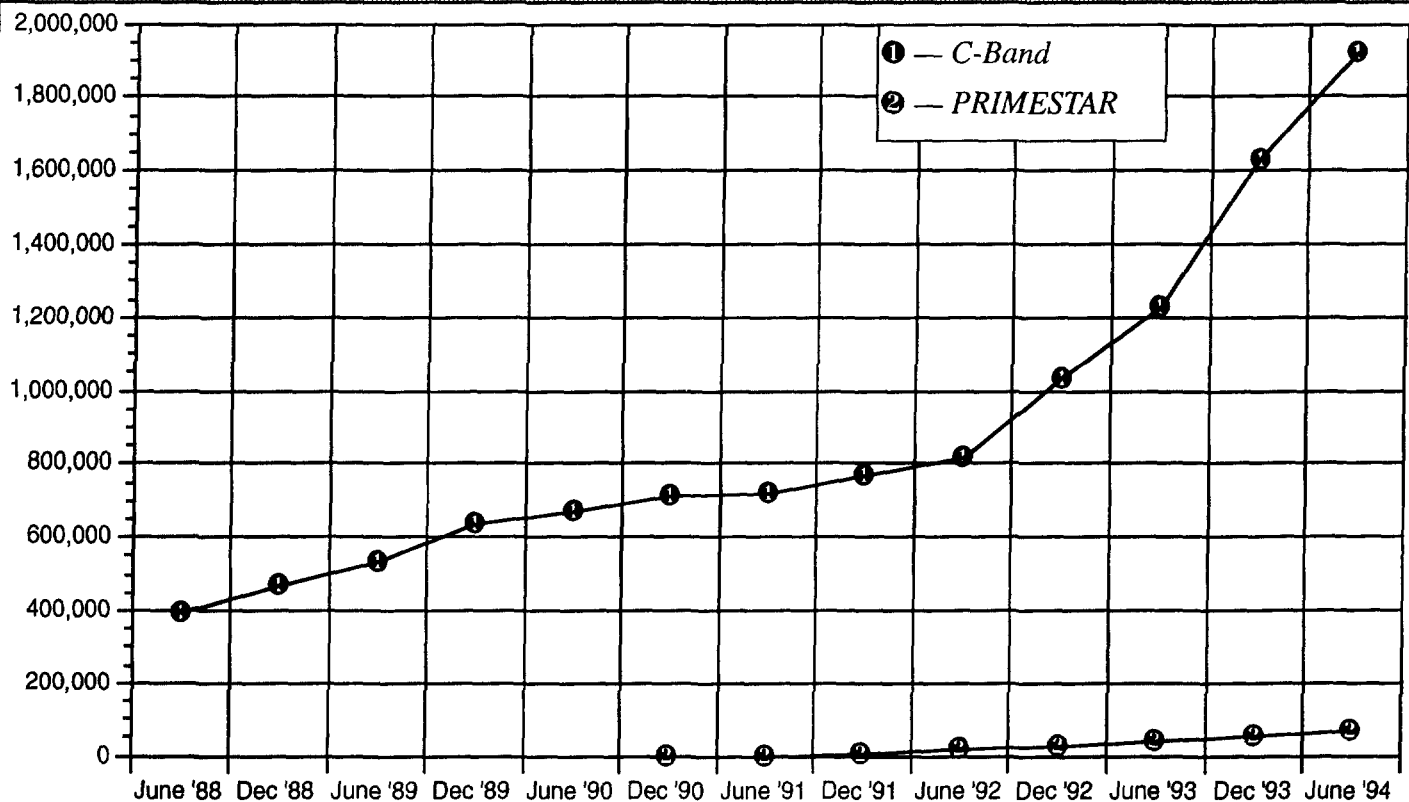
In addition, C-Band has suffered through some very bad days recently, due to causes which can, and should, be resolved in the near future. Namely, last November's module shortages set the business back as customers frequently couldn't get their hands on any of the product. Then the industry's consumer financing woes deepened to the point where only 2 out of every 5 sales resulted in planted dish.

Today, however, the module shortage is history; the industry is working hard to solve its financing problems; and a new \$15 million C-Band advertising campaign financed by General Instrument should help the full-view dish garner more customers in the months

June '94: 1,993,000
DTH Subscriber Pie



June 1988 to June 1994: DTH Subs Grow To Nearly 2 Million...



Subscribers at 2.5 M Apiece

ahead.

In all, key industry observers project 2.5 million C-Band program subscriber universe by the end of this year.

As mentioned, a similar number is projected for DBS, with the **DIRECTV**/-**USSB** DSS service expecting a total of 1.5 million customers by year's end, while **PRIMESTAR** garners some 1 million.

This requires some astonishing growth rates – and that, DBS has had. According to estimated subscriber counts provided by USSB's *Stan Hubbard* and **DIRECTV**'s *Eddy Hartenstein*, DSS subscribers ballooned by nearly 60% in the last quarter. While not growing quite as fast, **PRIMESTAR** also advanced at a rapid pace.

Obviously, this pace will gradually slow. For starters, the two DBS services are believed to be nearing the end of the early adopter gotta-haves.

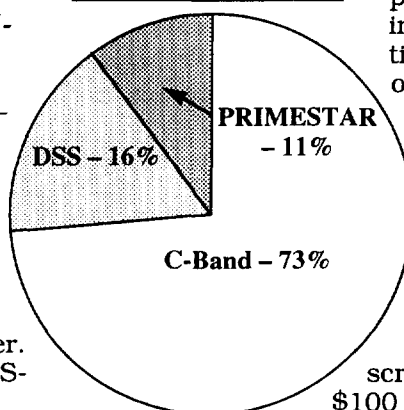
Thus future sales will require less hustling the product out the door and more marketing.

This point has been lost on none of the DBS entrants. At **DIRECTV**, for example, the 1995 game plan calls for sweeping rural markets via new dealer incentives, moving into commercial and some office markets, further targeting sports fans with a new baseball package, plus consumer ads slated at around \$35 million.

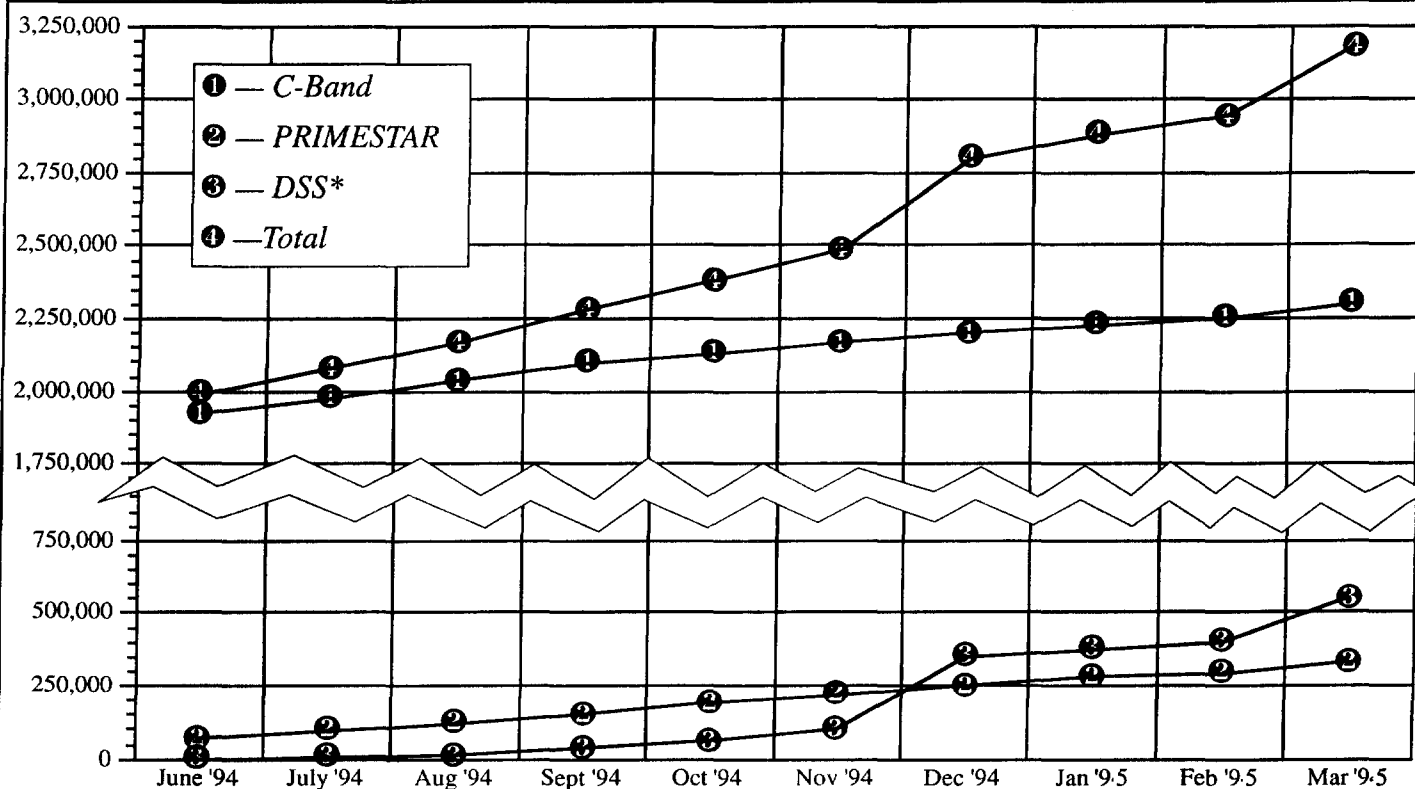
USSB will spend a similar amount of its advertising budget on a "more aggressive", mostly national campaign aimed at TV enthusiasts and dissatisfied cable subscribers.

In an attempt to make up for its subscriber lag, **PRIMESTAR** has announced a \$100 million campaign designed to "brand" the service much like a can of soup. But, this particular soup will focus on its low-cost, nothing-to-buy aspects. •

**March 95: 3,107,000
DTH Subscriber Pie**



...With Push From DBS, Subs Leap by 1 Million in Next Three Quarters



*(All DSS and PRIMESTAR numbers are estimates, based on company announcements)

EQUIPMENT CHARTS

April 1994 - March 1995

First Three Months of '95 Exceeds '94, Despite Cries of C-Band's Demise

By now, everybody knows about the hugely successful year the DTH industry had in 1994. The question now is: Can the industry duplicate that success in 1995?

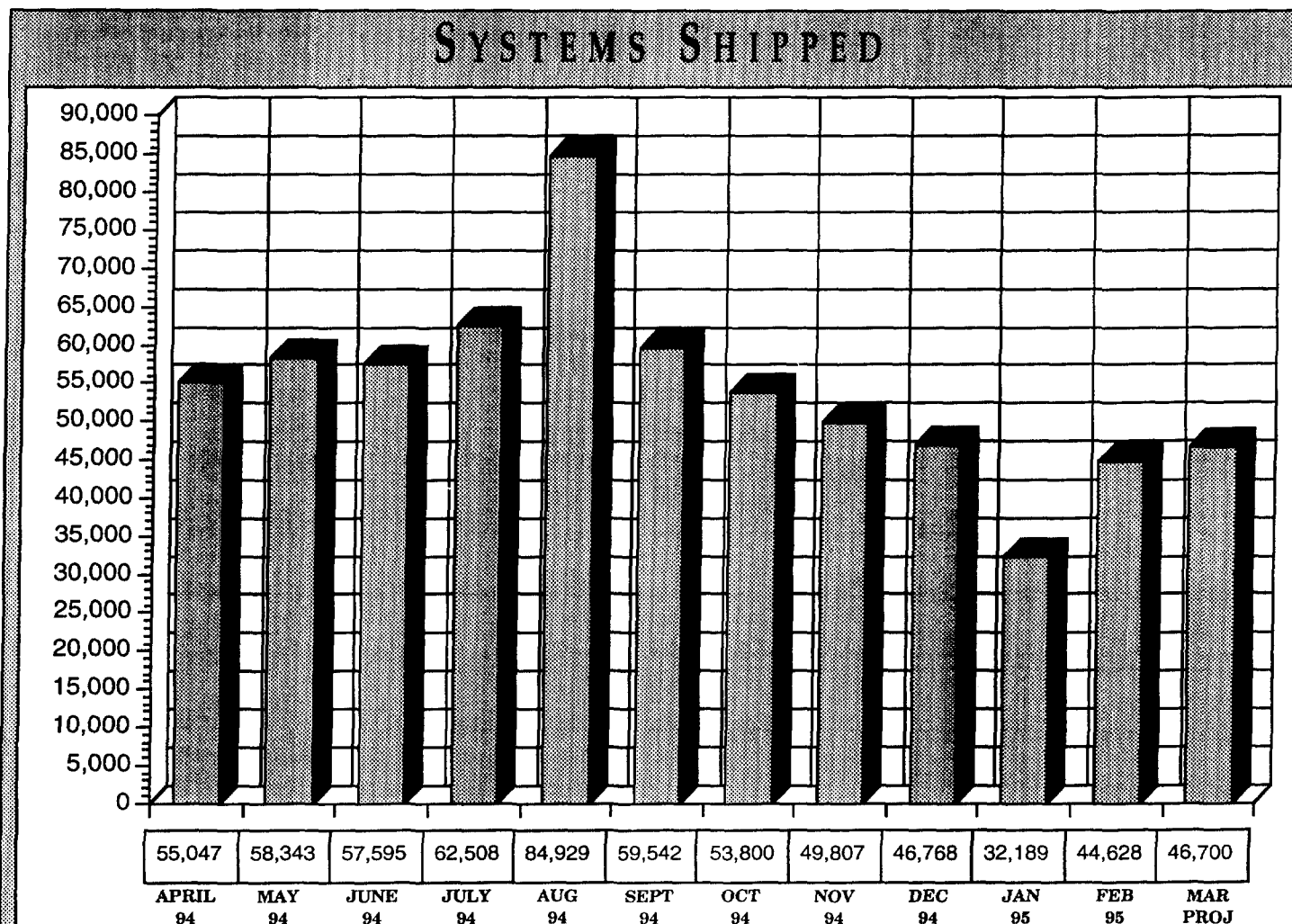
The chart below seems to show a downward trend in overall systems shipped, which could lead some to incorrectly deduce that industry doomsayers are correct in predict-

ing the demise of C-Ku-Band home sat systems.

But a closer look at industry numbers reveals the caveat that, if the first three months are a harbinger of future success, 1995 could actually surpass the breakthrough year of 1994. Equipment manufacturers shipped 123,517 systems in the first three months of 1995 (32,189 - Jan.; 44,628 - Feb.; 46,700 (projected) - Mar.). This represents an improvement of 5,806 systems from last year (117,711 Total; 32,361 - Jan.; 35,514 - Feb.; 49,836 - Mar.).

And with the first three months of 1995 figured into the last nine of 1994, it is safe to announce that the last 12 months has been the most flourishing time in the C-Band industry.

SBCA/MEDIA BUSINESS CORP **SkyTRENDS** research project calculations show that 651,856 systems were shipped in the last 12 months, with an average of 54,320 systems being shipped each month. All of which gives hope to the suggestion that the C-Band industry has even brighter days ahead. (See March, Page 8)



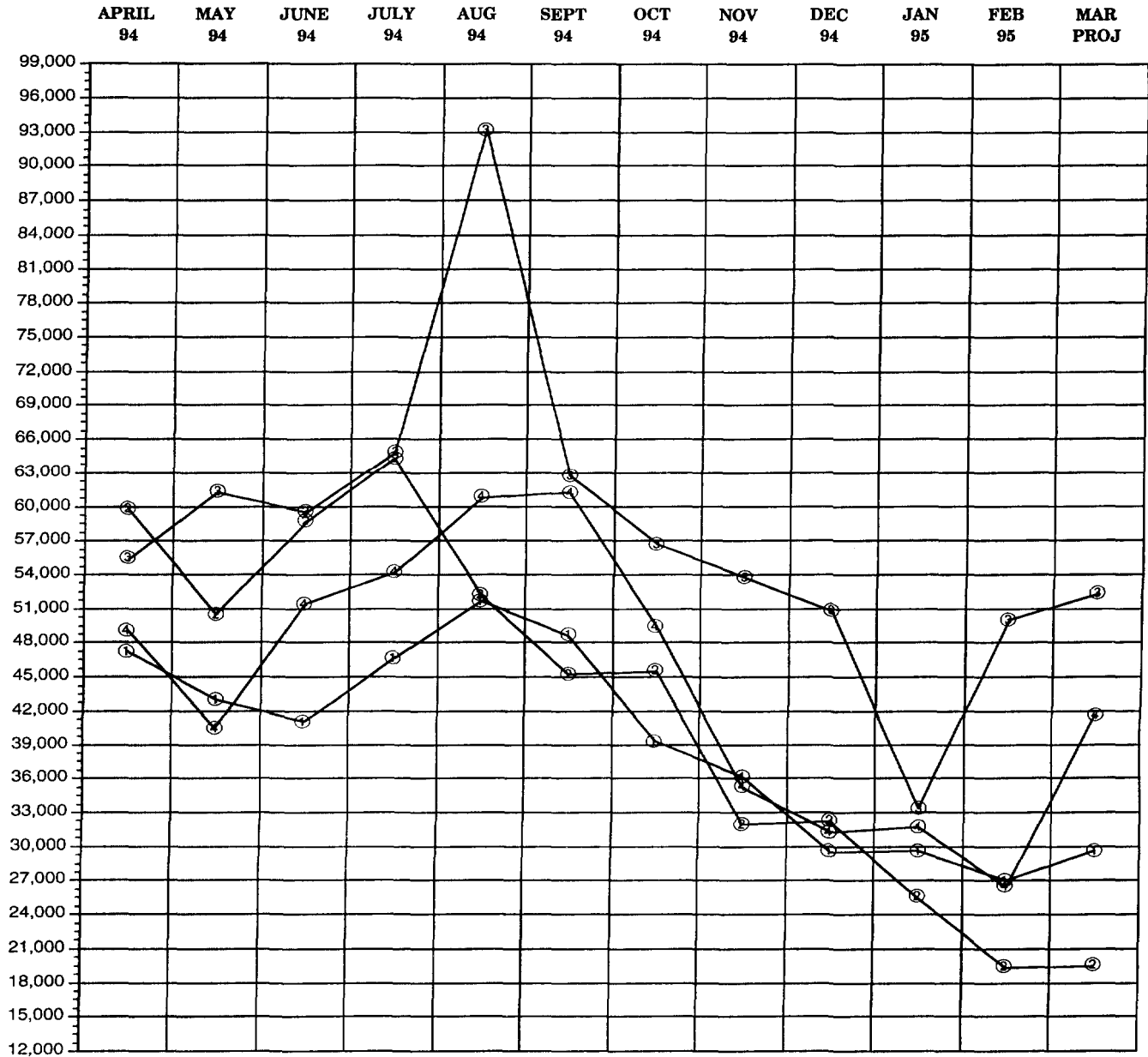
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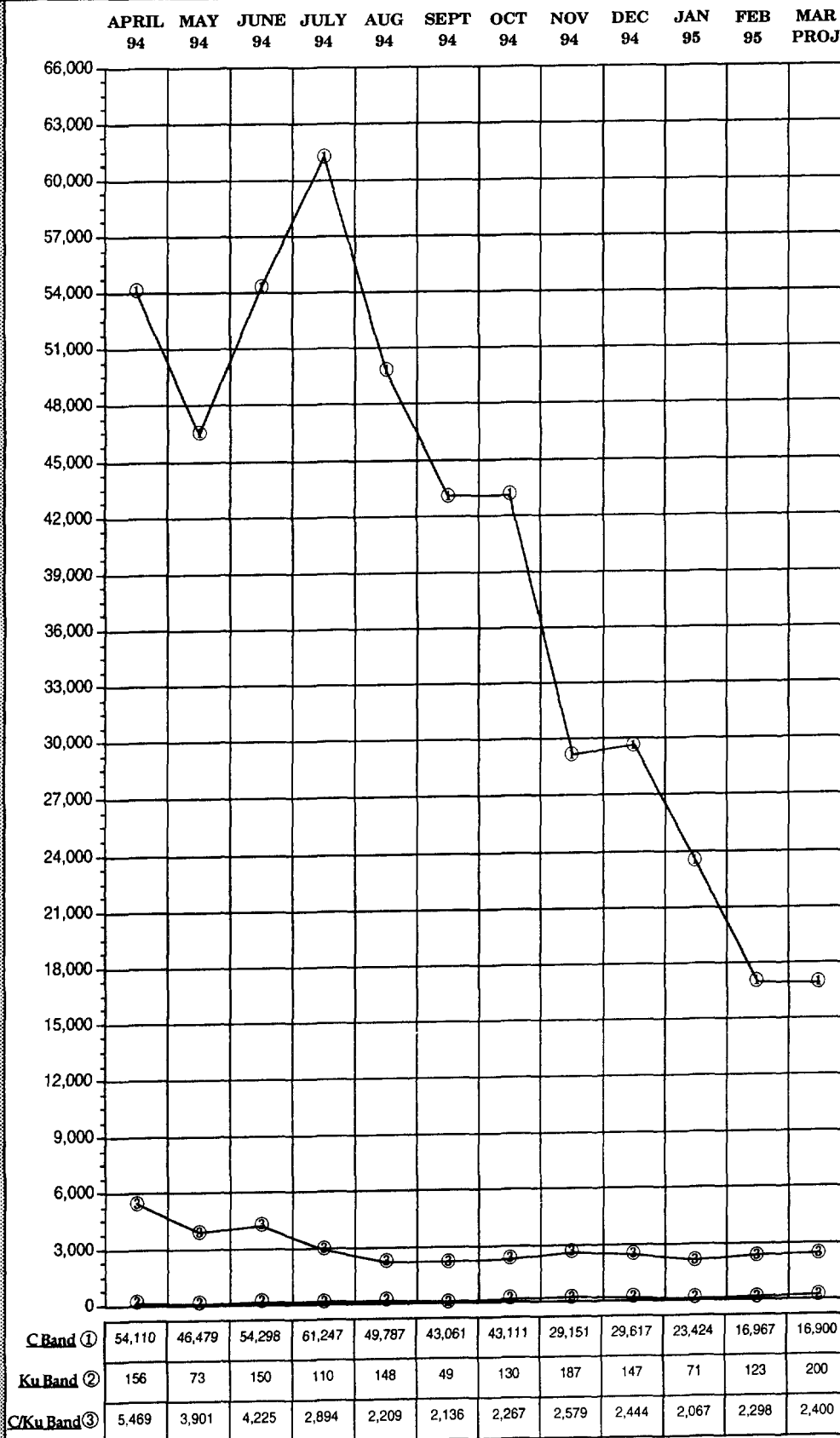
TOTAL EQUIPMENT



- ① Antennas
- ② Feedhorns
- ③ Receivers
- ④ LNBS

APRIL 94	MAY 94	JUNE 94	JULY 94	AUG 94	SEPT 94	OCT 94	NOV 94	DEC 94	JAN 95	FEB 95	MAR PROJ
47,199	43,027	40,992	46,567	51,646	48,664	39,286	36,140	29,555	29,570	27,013	29,600
59,735	50,453	58,673	64,251	52,144	45,246	45,508	31,917	32,208	25,562	19,388	19,500
55,442	61,244	59,536	64,778	93,188	62,690	56,653	53,752	50,739	33,346	49,985	52,300
49,061	40,435	51,422	54,149	60,773	61,173	49,429	35,245	31,236	31,713	26,509	41,600

FEEDHORNS



March Equipment Numbers Forecast Spring Increases

(From Page 6) The chart on Page 7 plots the monthly shipments of individual components (receivers, antennas, feedhorns and LNBs), and some interesting results are shown.

First of all, don't be alarmed by the downward trend of all equipment components from October through February. These winter months consistently underperform other times due to inclement weather, Christmas-time savings and the frozen ground. To prove this, March's equipment numbers, like a groundhog stepping gingerly from his winter den, are already hinting of improved sales in the upcoming spring months.

Another noticeable trend shown by this chart, as well as the chart plotting the shipments of individual feedhorns on the left, is the dramatic drop feedhorns experienced from July onward. An industry-wide survey conducted by Sky-REPORT could not find any conclusive reasoning for this, but one popular reason seemed to be reporting confusion, as some equipment manufacturers may possibly be reporting feedhorns as LNBs.

The rest of the components on the Total Equipment chart were not as volatile as feedhorns, but rather performed according to the expected rise-fall-rise pattern during the summer, winter and spring months.

With the exception of two months (August and January), the performance of receivers remained fairly constant from April '94-March '95. The infamous GI (See Receiver, Page 10)

RECEIVERS

